ABSTRACT OF THE DISCLOSURE

A magnetic memory of the present invention includes two or more memory layers and two or more tunnel layers that are stacked in the

5   thickness direction of the layers.   The two or more memory layers are connected electrically in series.   A group of first layers includes at least one layer selected from the two or more memory layers.   A group of second layers includes at least one layer selected from the two or more memory layers.   A resistance change caused by magnetization reversal in the group

10   of first layers differs from a resistance change caused by magnetization reversal in the group of second layers.